

## INHOMOGENEOUS MATERIALS HAVING PHYSICAL PROPERTIES DECOUPLED FROM DESIRED FUNCTIONS

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### ABSTRACT

10 A composition comprises a first component that provides a predetermined  
response to radiation, and a second component. Upon curing of the composition, portions  
of the first component bind together portions of the second component to form an  
inhomogeneous material having physical properties substantially determined by the  
second component. The function provided by the first component's response to radiation  
and the macroscopic properties determined by the second component are largely  
15 decoupled and thus may be separately optimized. Some embodiments provide photo-  
patternable low dielectric constant materials that may be advantageously employed in  
metal interconnect layers in integrated circuits, for example.